

REMARKS/ARGUMENTS

This Amendment is filed in response to the non-final Office Action mailed August 22, 2005. Claims 1, 3, 4, 6-8 and 10-20 have been rejected. Claims 1, 8 and 15 have been amended. Claims 1, 3, 4, 6-8 and 10-20 are pending after entry of the present amendment. It is respectfully submitted that the pending claims define allowable subject matter. Applicants respectfully request reconsideration of the application in view of the above amendments and the following remarks submitted in support thereof.

Discussion of Objection to the Drawings

In Section 6 of the Office Action, the Examiner objected to the drawings because of minor informalities that include handwritten descriptions in Figures 2-6 and 8-9 (version 4/30/2001).

In response to the Examiner's objection, Figures 2-6 and 8-9 have been amended to replace the handwritten descriptions with typewritten descriptions. No new matter has been added.

Discussion of Objection to Claim 15

In Section 7 of the Office Action, the Examiner objected to Claim 15 because of the following informality: "the JAVA module includings at least," and required appropriate correction.

In response to the Examiner's objection, Applicants respectfully note that Claim 15 has been amended to correct the typographical error by replacing the word "includings" with the word "includes."

Discussion of Provisional Double-Patenting Rejection

In Section 8, of the Office Action, the Examiner provisionally rejected Claims 1, 3-4, 6-8 and 10-18 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-13 of a co-pending application 09/833,845. The Examiner also provisionally rejected Claims 19-20 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-13 of the co-pending application 09/833,845 in view of Anderson, XP-002239737.

Applicants respectfully note that a terminal disclaimer will be filed upon allowance of the pending Claims 1, 3-4, 6-8 and 10-20 in the present Application.

Discussion of Rejection of Claims 1, 3-4, 6-8 and 10-18 under 35 U.S.C. §103(a)

In Section 11 of the Office Action, the Examiner rejected Claims 1, 3-4, 6-8 and 10-18 under 35 U.S.C. §103(a) as being unpatentable over Ma et al. (U.S. Pat. No. 5,920,725), in view of the Hamilton (U.S. Pat. No. 6,889,227).

The Examiner's rejection is respectfully traversed. First, as acknowledged by the Examiner, Ma et al. does not disclose a JAVA module in a middle tier between a client browser and databases, where the JAVA module includes at least one original *entity bean* and at least one original state object in communication with the original entity bean, or storing a state of the original entity bean, as recited in independent Claims 1, 8 and 15. In fact, Ma et

al. makes no implicit or explicit disclosure of an *entity bean*. Therefore, Ma et al. does not (and indeed could not) disclose generating an upgraded *entity bean* or providing state management for the *original entity bean*, as provided in independent Claims 1 and 15. Further, Ma et al. does not (and indeed could not) disclose a repository having upgraded class files for an original *entity bean* or creation of an upgraded *entity bean*, as recited in independent Claim 8. Similarly, Ma et al. does not (and indeed could not) disclose disabling an original *entity bean*, as provided in independent Claim 15. Nothing in Hamilton or Nally teach or suggest these elements which are absent from Ma et al. Specifically, Hamilton, like Ma et al., as acknowledged by the Examiner, makes no implicit or explicit disclosure of a JAVA module including an *entity bean*. Rather, Hamilton discloses a database access bridge system and process that enables a two-tier application to operate in a three-tier computer environment without specific programming for the three-tier environment. *See Abstract.* Nally, on the other hand, discloses entity beans in a context completely unrelated to the teachings of the claims of the present application. Specifically, Nally discloses a *transaction management* approach in an enterprise environment in which multiple concurrent and/or nested transactions have simultaneous access to an Enterprise JavaBean (EJB). *See Abstract.* The teachings of Nally do not disclose (and are not related to) how to *perform real time modifications* to the managed state of a Java-based application with run time object modification and generation, as recited in the claims of the present application, but rather disclose what to do *after an application or application user has already made modifications* to an Enterprise JavaBean (EJB) and requests to commit the modifications. *See Abstract.* For example, Nally discloses that “a determination is first made as to whether committing the modifications will result in an unacceptable data conflict with other versions of the same EJB. If no unacceptable data conflict will occur, and after resolution of those conflicts that

can be resolved, the modifications are committed.” *See* Abstract. Nally then discloses managing concurrent and/or nested transactions on the EJB using a method it calls “versioning.” *See* Col. 15, lines 56-58.

Second, Applicants have amended independent Claims 1, 8 and 15 to positively recite that both the original state object and the upgraded state object are included in the JAVA module, and that the original state object is upgraded in the JAVA module located in the middle tier. Applicants note that support for these amendments can be found in the present application at page 27, lines 11-18; and in Figure 8. The meta server 70 of Ma et al. does not include an original entity bean and an original state object. Accordingly, Ma et al. fails to disclose a JAVA module (e.g. meta sever 70) that includes an original entity bean and an original state object (as acknowledged by the Examiner) as well as an upgraded state object, as recited in independent Claims 1, 8 and 15 of the present application. In addition, Ma et al. also fails to disclose a JAVA module, in a middle tier, where upgrades of the state object are performed, as recited in independent Claims 1, 8, and 15. Rather, Ma et al. discloses an object upgrade process that includes multiple components, such as the meta server 70, a compiler/linker 78, and an object adaptor 80. *See* Col. 8, lines 1-22; Figure 5. Additionally, the object upgrade is completed in the server-application 86 and the client-application 74, which are multiple applications located in multiple tiers. *See* Col. 8, lines 25-29. Likewise, Hamilton does not disclose a JAVA module that includes an original entity bean and an original state object (as acknowledged by the Examiner), and an upgraded state object that is upgraded in the JAVA module, as recited in independent Claims 1, 8, and 15. Nally also does not disclose an upgraded object that is upgraded in a JAVA module since, as discussed above, the teachings of the Nally do not relate to *performing* run time object modification and

generation (as recited in the Claims of the present application) but instead relate to how to *manage* requests to commit an object modification that has *already* been performed.

The foregoing demonstrates that the cited primary references of Ma et al., Hamilton, and Nally alone, or in combination, do not teach or suggest all of the elements and limitations of independent Claims 1, 8 and 15, and likewise fail to teach or suggest each and every element of the claims depending therefrom.

Third, one of ordinary skill in the art would not find suggestion or motivation to apply the principles taught in Hamilton, and Nally to the claims of the present application. The teaching of the claims of the present application relate to performing real time modifications to the managed state of a Java-based application. The teachings of Hamilton, as discussed above, relate to database access bridge systems and processes that enable a two-tier application to operate in a three-tier computer environment without specific programming for the three-tier environment. Logically, therefore, one skilled in the art reading the teachings of Hamilton would not be directed to apply the principles of Hamilton to the teachings of the present application which are *in toto* unrelated. Further, the teachings of Nally take for granted that an object modification has been performed and, without any discussion about how the modification is performed, disclose managing requests to commit the modification, as discussed above. One skilled in the art reading the teachings of Nally not only would not (but could not) apply these principles to the present application since the teachings of the present application relate to performing modifications not what to do about committing to the modifications *ex post facto*.

In order to establish a *prima facie* case of obviousness, the rejection must demonstrate that (1) the cited references teach all of the claimed elements and limitations; (2) there is a suggestion or motivation in the prior art to modify or combine the reference teachings; and

(3) there is a reasonable expectation of success. MPEP § 2143; *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991).

Accordingly, Applicants submit that Claims 1, 3-4, 6-8, and 10-18 are patentable under 35 U.S.C. § 103(a) over Ma et al. in view of Hamilton and further in view of Nally. Applicants therefore respectfully request reconsideration, and withdrawal of the § 103 rejections.

Discussion of Rejection of Claims 19 and 20 under 35 U.S.C. §103(a)

In Section 12 of the Office Action, the Examiner rejected Claims 19 and 20 under 35 U.S.C. §103(a) as being unpatentable over Ma et al.-Hamilton-Nally as applied to Claim 18, and further in view of the Anderson et al. ("Dynamic Code Update in JDrums," XP-002,249,737, June 2000).

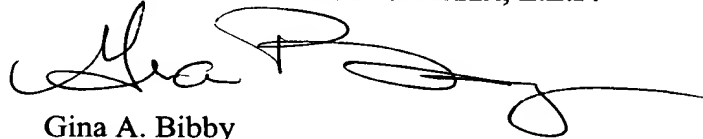
The Examiner's rejection is respectfully traversed. For at least the reasons stated above regarding the Applicants submission that independent Claim 18 is patentable under 35 U.S.C. § 103(a) over Ma et al. in view of Hamilton and further in view of Nally, Claims 19 and 20, which depend directly or indirectly from independent Claim 18, are patentable under 35 U.S.C §103 (a) over Ma et al.-Hamilton-Nally as applied to Claim 18, and further in view of the Anderson et al. ("Dynamic Code Update in JDrums," XP-002,249,737, June 2000).

Accordingly, Applicant respectfully requests the Examiner to withdraw the 35 U.S.C. § 103(a) rejection for pending Claims 19 and 20.

Conclusion

In view of the foregoing, the Applicant respectfully submits that all the pending Claims 1, 3, 4, 6-8 and 10-20 are in condition for allowance. Accordingly, a Notice of Allowance is respectfully requested. If the Examiner has any questions concerning the present amendment, the Examiner is requested to contact the undersigned at (408) 749-6920. If any additional fees are due in connection with filing this amendment, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No. SUNMP007). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
MARTINE PENILLA & GENCARELLA, L.L.P.

A handwritten signature in black ink, appearing to read 'Gina A. Bibby', with a long horizontal flourish extending to the right.

Gina A. Bibby
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IN THE DRAWINGS

Amendment to the drawings:

The attached drawing sheets provide changes to Figures 2-6 and 8-9. These sheets replace the original sheets for Figures 2-6 and 8-9.